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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|------------------------------|-------------|----------------------|-------------------------|------------------|
| 09/904,626 | 07/16/2001 | George Foti | LMC 2001-016 | 2975 |
| 7590 | 01/10/2005 | | EXAMINER | |
| SANDRA BEAUCHESNE | | | MOORE JR, MICHAEL J | |
| Ericsson Canada Inc. | | | ART UNIT | PAPER NUMBER |
| Patent Department (LMC/UP) | | | 2666 | |
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| CANADA | | | DATE MAILED: 01/10/2005 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 09/904,626 | FOTI ET AL. | |
| | Examiner | Art Unit | |
| | Michael J. Moore, Jr. | 2666 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 16 July 2001.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-22 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 16 July 2001 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>7/16/01, 11/12/02</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statements (IDS) submitted on 7/16/2001 and 11/12/2002 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the examiner has considered the information disclosure statements.

Specification

2. The abstract of the disclosure is objected to because of the following: On line 10, the phrase "Suggested publication figure: Figure 2" should be deleted. Correction is required. See MPEP § 608.01(b).

Claim Objections

3. Claims 9, 13, and 17 are objected to because of the following informalities:
Regarding claims 9 and 13, a "period" is needed at the end of each of these claims.

Regarding claim 17, on line 5, the word "the" after word "with" should be "a". Appropriate correction is required.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1 and 2 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 1 and 2 are directed to a data structure (table) with no claimed practical application. These claims are directed to descriptive material *per se*. See MPEP 2106.

Claims 3-7 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 3-7 are directed to a data structure (data record) with no claimed practical application. These claims are directed to descriptive material *per se*. See MPEP 2106.

Claims 20-22 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 20-22 are directed to a set of rules (protocol, computer program) with no claimed practical application. These claims are directed to descriptive material *per se*. See MPEP 2106.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1, 3, and 5-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Rawlins et al. (U.S. 2002/0194369) (“Rawlins”). Rawlins teaches all of the limitations of the listed claims with the reasoning that follows.

Regarding claim 1, “a table for associating an Internet Protocol (IP) address with a Policy Enforcement Point (PEP), wherein the table at least comprises a column for ranges of IP addresses and a column for the PEPs associated with the IP address ranges, and a number of rows, each row listing an IP address range and its associated

PEP” is anticipated by Edge Point Identification Table 286 shown in Figure 7 that defines a range or ranges of addresses for which an edge router (PEP) is a receiving edge router as spoken of on page 8, paragraph 129.

Regarding claim 3, “a Policy Decision Point (PDP) comprising at least one stored data record comprising an Internet Protocol (IP) address range and a Policy Enforcement Point (PEP) associated with the IP address range” is anticipated by Policy Decision Point 160 shown in Figure 7 that contains Edge Point Identification Table 286 that defines a range or ranges of addresses for which an edge router (PEP) is a receiving edge router as spoken of on page 8, paragraph 129.

Regarding claim 5, “wherein the PDP resides in a Third Generation Partnership Project (3GPP) network” is anticipated by the network shown in Figure 3, which contains PDPs 160a and 160b.

Regarding claim 6, “wherein the PDP is an IP Policy Control (IPPC)” is anticipated by Policy Decision Point 160 shown in Figure 7.

Regarding claim 7, “wherein the PDP resides in a Proxy Call State Control Function (P-CSCF)” is anticipated by Policy Decision Point 160 shown in Figure 7.

Regarding claim 8, “a method for updating a data record associating an Internet Protocol (IP) address range with at least one Policy Enforcement Point (PEP)” by “sending by the PEP to the network node a message comprising the IP addresses it is assigned and upon reception of the message by the network node, updating the corresponding data record” is anticipated by the local learning of address range and

associated edge router information by PDP 160 of Figure 7, which is stored in Edge Point Identification Table 286 (data record) as spoken of on page 8, paragraph 129.

Regarding claims **9 and 13**, “wherein the network node is a Policy Decision Point (PDP)” is anticipated by Policy Decision Point 160 shown in Figure 7.

Regarding claim **10**, “wherein the IP addresses sent in the message are represented by at least one IP address range” is anticipated by the address range information spoken of on page 8, paragraph 129.

Regarding claims **11 and 15**, “wherein the data record is an entry in a table” is anticipated by Edge Point Identification Table 286 of Figure 7.

Regarding claim **12**, “a method for updating a data record associating an Internet Protocol (IP) address range with a Policy Enforcement Point (PEP)” by “sending by the PEP routing information to the network node and upon reception of the routing information at the network node, extracting from the routing information the IP addresses assigned to the PEP and updating the data record” is anticipated by the local learning of address range and associated edge router information (routing information) by PDP 160 of Figure 7, which is stored in Edge Point Identification Table 286 (data record) as spoken of on page 8, paragraph 129.

Regarding claim **14**, “wherein the IP addresses in the routing information are represented by at least one IP address range” is anticipated by the address range information spoken of on page 8, paragraph 129.

Regarding claim 16, “wherein the routing information is sent using a standard routing protocol” is anticipated by the COPS protocol spoken of on page 8, paragraph 129.

Regarding claim 17, “a method for sending policy information from a Policy Decision Point (PDP) to a Policy Enforcement Point (PEP)” by “reading by the PDP from a data record associating IP addresses and PEPs” and “sending the policy information to the PEP associated with the IP address” is anticipated by PDP 160 using Edge Point Identification Table 286 to push down address range and associated edge router (PEP) information to local Edge Point Identification Table 252 of Figure 6 using the COPS protocol as spoken of on page 8, paragraph 129.

Regarding claim 18, “wherein the data record is part of a table” is anticipated by Edge Point Identification Table 286 of Figure 7.

Regarding claim 19, “wherein the table resides within the PDP” is anticipated by Edge Point Identification Table 286 stored within PDP 160 of Figure 7.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rawlins et al. (U.S. 2002/0194369) ("Rawlins") in view of Ebata et al. (U.S. 6,708,209) ("Ebata").

Regarding claim 20, Rawlins teaches the use of the COPS protocol to exchange address range and associated edge router information between a PDP and PEP on page 8, paragraph 129. Rawlins also teaches the local learning (receiving messages) of address range and associated edge router information by PDP 160 on page 8, paragraph 129. Rawlins does not explicitly teach the use of a Client Open (OPN) message containing a field listing the IP addresses assigned to the PEP. However, Ebata teaches the use of a Client-Open (CO) message within the COPS protocol in Figure 23 for exchanging policy information between policy servers as spoken of on column 16, line 15 – column 17, line 3. At the time of the invention, it would have been obvious to someone skilled in the art given these references to make use of a Client Open message as taught in Ebata along with the local learning of address range and associated edge router information as taught in Rawlins in order to provide admission control while using a defined type of message in the COPS protocol.

Regarding claim 21, Rawlins teaches the use of the COPS protocol to exchange address range and associated edge router information between a PDP and PEP on page 8, paragraph 129. Rawlins also teaches the local learning (receiving messages) of address range and associated edge router information by PDP 160 on page 8, paragraph 129. Rawlins does not explicitly teach the use of a Report (RPT) message containing a field listing the IP addresses assigned to the PEP. However, Ebata teaches the use of a Report State (RPT) message within the COPS protocol in Figure 23 for exchanging policy information between policy servers as spoken of on column 16, lines 15 – column 17, line 3. At the time of the invention, it would have been obvious to someone skilled in the art given these references to make use of a Report State message as taught in Ebata along with the local learning of address range and associated edge router information as taught in Rawlins in order to provide admission control while using a defined type of message in the COPS protocol.

Regarding claim 22, Rawlins teaches the use of the COPS protocol to exchange address range and associated edge router information between a PDP and PEP on page 8, paragraph 129. Rawlins also teaches the local learning (receiving messages) of address range and associated edge router information by PDP 160 on page 8, paragraph 129. Rawlins does not explicitly teach the use of a Report (RPT) message containing a field listing changes to IP addresses assigned to the PEP. However, Ebata teaches the use of a Report State (RPT) message within the COPS protocol in Figure 23 for exchanging policy information between policy servers as spoken of on column 16, lines 15 – column 17, line 3. At the time of the invention, it would have been obvious to

someone skilled in the art given these references to make use of a Report State message as taught in Ebata along with the local learning of address range and associated edge router information as taught in Rawlins in order to provide admission control while using a defined type of message in the COPS protocol.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Marchand (U.S. 6,714,515) and McCloghrie et al. (U.S. 6,286,052) are both references that contain material pertinent to this application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Moore, Jr. whose telephone number is (571) 272-3168. The examiner can normally be reached on Monday-Friday (8:30am - 5:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema S. Rao can be reached at (571) 272-3174. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit: 2666

Michael J. Moore, Jr.
Examiner
Art Unit 2666

mjm MM



FRANK DUONG
PRIMARY EXAMINER